

# Licensing of DP/PRO embedded subjects in Russian

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BSTRACT

The paper contributes to the ongoing discussion of DP/PRO alternation examining properties of Russian evaluative adjectival predicatives that embed a non-finite clause (i.e. <code>važno</code> 'important') and arguing that (i) sentences with these predicates and an embedded non-finite clause are ambiguous between obligatory control and overt embedded subject analyses, (ii) the DP/PRO alternation does not correlate with the feature specification or the structural size of an embedded clause, (iii) the alternation is not free and can be formally accounted for by an analysis in terms of cross-clausal licensing of embedded overt DP subjects. The novel data from Russian challenge existing approaches to DP/PRO distribution and non-finite subordination in Slavic languages and provide further support for (a version of) Case filter.

 $\textbf{keywords} \; Russian \; \cdot \; Case \; \cdot \; dative \; \cdot \; control \; \cdot \; DP \; distribution \; \cdot \; DP/PRO \; alternation$ 

# 1 INTRODUCTION

The paper presents and examines a previously undescribed case of DP/PRO alternation in non-finite clauses in Russian. I focus on sentences with a matrix evaluative adjectival predicate (such as *važno* 'important') and an infinitival complement clause (1) and demonstrate that they can both support obligatory control and have an overt embedded subject.<sup>1</sup>

- (1) a. Maše<sub>i</sub> bylo važno [PRO<sub>i+</sub> pojti vmeste v kino].

  Maša.dat was important.pr go.inf together to cinema
  'For Maša it was important to go to the cinema together.'
  - b. Bylo važno [stroitel'stvu zanjat' dva mesjaca]. was important.PR construction.DAT take.INF two months 'It was important for the construction to take two months.'

Providing the results for various diagnostics, I show that the subject position of an embedded non-finite clause in (1) can be occupied either by an obligatorily controlled PRO or by a referentially independent overt DP.<sup>2</sup> The DP/PRO alternation does not correlate with the Tense – agreement characteristics of the embedded clause or its structural size, implying that covert and overt subjects can be found in the same syntactic environment. This challenges existing approaches to DP/PRO distribution that postulate that it is strictly complementary and depends on the finiteness and/or feature specification of the clause (Landau, 2000, 2004; Bondaruk, 2006; Pires, 2007; Sitaridou, 2007, i.a.).

Furthermore, the DP/PRO alternation in Russian is not completely free either, in contrast with, for instance, DP/PRO alternation in Tamil and other Dravidian languages, as described by

 $<sup>^{1}</sup>$ Glossing abbreviations: ACC = accusative, DAT = dative, F = feminine, FUT = future, GEN = genitive, INF = infinitive, INS = instrumental, N = neuter, NEG = negation, NOM = nominative, PR = predicative, PTCP = passive participle, SG = singular, SUBJ = subjunctive.

<sup>&</sup>lt;sup>2</sup>This research was presented at FASL 28 in May 2019. Since then, Burukina (2020) has made a similar observation regarding infinitival clauses embedded under verbs of order and permission and deontic modals, adopting a similar analysis to account for their behavior.

Sundaresan & McFadden (2009). In Russian, an overt embedded (dative) subject is allowed only when there is no potential overt (dative) controller available within a higher clause.

To formally account for this generalization I develop an analysis in terms of cross-clausal licensing of embedded overt DP subjects. First, I follow Chomsky (1981) and Chomsky & Lasnik (1993) in that PRO and overt DPs differ in that the latter needs to be Case licensed.<sup>3</sup> At the same time, I assume that, in principle, DPs and PRO can be merged in the same position. Second, I argue that, since non-finite clauses are inherently deficient and have no subject Case available, overt DP subjects can only be licensed from outside of the clause; in the case of Russian sentences with a matrix evaluative adjective, this can be done by a matrix applicative head, which normally introduces and licenses a (dative) Attitude Holder merged in Spec,ApplP. Thus, the two DPs – the embedded subject and the matrix Holder – end up competing for one feature. Third, I demonstrate that an overt embedded subject does not have to undergo A-movement to a matrix position and can stay relatively low within its clause being licensed long-distance over a clausal boundary. Thus, the novel data from Russian provide support for Case-licensing accounts and for the availability of long-distance A-dependencies (see Wurmbrand 2019 for an overview of the literature on long-distance raising and agreement).

The paper is structured as follows. Section 2 presents the data focusing on the constructions with a matrix evaluative predicate and an embedded non-finite clause and providing the results for various control and raising diagnostics. Section 3 discusses the DP/PRO alternation in more detail showing that it neither can be connected to the feature specification of the embedded clause nor is entirely free. Section 4 proposes the analysis. Section 5 concludes the paper outlining some potential directions for future research.

# 2 THE DATA: DP/PRO ALTERNATION UNDER EVALUATIVE ADJECTIVAL PREDICATES

#### 2.1 GENERAL SYNTACTIC PROPERTIES

Evaluative adjectival predicates in Russian, such as važno 'important' and interesno 'interesting', known in traditional literature as predicatives, select a non-finite or a finite (indicative or subjunctive) clausal argument, exhibiting default neuter singular agreement. They usually co-occur with an optional dative DP (DP<sub>DAT</sub>), which is often interpreted as an Attitude Holder (2).

- (2) a. (Maše) bylo važno ujti.

  Maša.DAT was important.PR leave.INF

  'For Maša it was important to leave.'
  - b. (Maše) bylo važno čtoby Anna ušla. Маša.DAT was important.pr so that Anna.noм leave.subj

'For Maša it was important for Anna to leave.'

c. (Maše) bylo važno čto Anna ujdet.

Maša.DAT was important.PR that Anna.NOM leave.FUT

'For Maša it was important that Anna will leave.'

Morphologically, these predicatives are similar to the agreeing short neuter singular forms of the equivalent adjectives; see an example in (3), where an adjective is used with a nominal subject and bears the same number and gender.

- (3) a. Maše byla važna ego ljubov'.

  Maša.DAT was important.F.SG his love.F.SG.NOM

  'His love was important to Maša.'
  - Maše bylo važno ego povedenije.
     Maša.DAT was important.n.sg his behavior.n.sg.nom
     'His behavior was important to Maša.'

<sup>&</sup>lt;sup>3</sup>Following the minimalist account of control, I assume that the feature that distinguishes PRO from lexical DPs is Case: Null for PROs and non-null for DPs. See, however, Sigurðsson (2008) who instead emphasizes the role of Person, i.a.

For an ongoing discussion of whether adjectival predicatives should be considered short adjectives or a separate category I refer the reader to Bonch-Osmolovskaja (2003) and Say (2013). For the present research it suffices to list the general distributional properties of predicatives and I leave the question about their category open for future investigation.

### 2.2 CONTROL VS. OVERT EMBEDDED SUBJECT DIAGNOSTICS

#### 2.2.1 OBLIGATORY COREFERENCE

The first step of analyzing sentences like (2-a) is to determine whether coreference between the  $\mathrm{DP}_{\mathrm{DAT}}$  and the understood subject of the embedded clause is obligatory and structurally conditioned and not established pragmatically. To do this, I test the common cases of non-obligatory control: long-distance control, non-c-commanding control, and arbitrary reference (Landau, 2013). As demonstrated in (4), all attempts to construct sentences like this with a matrix evaluative predicative result in ungrammaticality.<sup>4</sup>

- (4) a. Maša $_i$  skazala, čto Anne $_k$  važno  $ec_{\star_i/\star_j/\star_{arb/k}}$  ujti. Maša.nom said that Anna.dat important.pr leave.inf
  - Only: 'Maša said that for Anna it was important to leave.'
  - ← attempted long-distance control and arbitrary interpretation
  - b. [Kollegam Maši $_k$ ] $_i$  važno  $ec_{i/*j/*k}$  ujti. colleagues.dat Maša.gen important.pr leave.inf
    - Only: 'For Maša's colleagues it is important to leave.'
    - ← attempted non-c-commanding control

It should further be noted that a silent embedded subject cannot be a *pro*, since it must always be interpreted as a bound variable and, unlike pronominal items, cannot get a strict coreference reading, for instance, under ellipsis (5).

(5) Maše<sub>i</sub> važno ec<sub>i</sub> ujti i Anne tože. Maša.dat important.pr leave.inf and Anna.dat too Sloppy reading: 'For Maša it was important to leave and for Anna it was important to leave too.'

Strict reading, not available: '... and for Anna it was important for Maša to leave too.'

There are two ways to approach the relation between the  $\mathrm{DP}_{\mathrm{DAT}}$  and the embedded subject and to account for their obligatory coreference: (1) to assume that the  $\mathrm{DP}_{\mathrm{DAT}}$  is the embedded subject itself (raising/ECM analyses), or (2) to consider the  $\mathrm{DP}_{\mathrm{DAT}}$  a controller of a separate entity, namely PRO, in the embedded subject position.

# 2.2.2 THE DATIVE DP AS THE EMBEDDED SUBJECT

At least in some cases the dative DP should be unambiguously analyzed as the embedded subject itself, thematically related only to the embedded predicate. First, as demonstrated in (6), the  $\mathrm{DP}_{\mathrm{DAT}}$  sometimes refers to a non-sentient object that cannot be an Attitude Holder of the matrix evaluative predicate.

- (6) a. Važno stroiteľstvu zakončiťsa k koncu goda.
  important.pr construction.dat complete.inf by end year
  'It is important that the construction be complete by the end of the year.'
  - b. Važno ruke byť zalečennoj kak možno ranše. important.pr arm.dat be.inf heal.ptcp as possible soon 'It is important that the arm heal as soon as possible.'

 $<sup>^4</sup>$ In these examples I tentatively denote covert embedded subjects as ec (empty category), so that it remains possible to analyze them later as either PRO or (A/A') traces.

Second, the  $DP_{DAT}$  can be interpreted as a part of an embedded idiomatic expression (7). Assuming that this is only possible when an idiom chunk is thematically related to the idiomatic predicate, we can infer that 'black cat' in (7) is base-generated in a non-finite clause as an argument of 'run'.

(7) Očen' važno čërnoj koške ne probegat' meždu nami very important.PR black cat.DAT NEG run.INF between us Literally: 'It is very important for a black cat not to run between us.' Idiomatic available: 'It is very important for us not to quarrel.'

Finally, the results for the voice transparency diagnostic, which relies on the fact that passivization of a predicate does not result in a truth-conditional difference between the active and the passive constructions, match the results for the idiom chunk test presented above. As illustrated in (8), a sentence with a passivized embedded predicate can receive the same interpretation as its 'active' counterpart. This implies that, in both cases, the  $\mathrm{DP}_{\mathrm{DAT}}$  is a part of the (non-changing) embedded argument structure.<sup>5</sup>

- (8) a. Malč'iku važno byť ubitym Voldemortom. boy.dat important.pr be.inf kill.ptcp Voldemort.ins
  - (i) 'To the boy it is important to be killed by Voldemort.'  $(\neq b)$
  - (ii) 'It is important that the boy be killed by Voldemort.' (= b)
  - Voldemortu važno ubiť malčika.
     Voldemort.DAT important.PR kill.INF boy.ACC
    - (i) 'To Voldemort it is important to kill the boy.' ( $\neq$  a)
    - (ii) 'It is important that Voldemort kill the boy.' (= a)

Importantly, I argue that the  $\mathrm{DP}_{\mathrm{DAT}}$  does not have to undergo A-movement from the embedded subject position to a matrix position; in other words, the examples above should not be considered instances of true subject-raising.<sup>6</sup> This is supported by adjunct placement. As exemplified in (9), an adjunct that immediately precedes the embedded DP subject can be interpreted as modifying either the matrix predicate or the embedded one; at the same time, an adjunct placed after the dative subject can only be interpreted as embedded.

- (9) a. Važno bylo ešče včera rane zažiť. important.pr was just yesterday wound.dat heal.inf
  - (i) 'Yesterday is was important that the wound would heal.'
  - (ii) 'It was important that the wound would have healed yesterday.'
  - b. Važno bylo rane ešče včera zažiť.
    important.PR was wound.DAT just yesterday heal.INF

Only: 'It was important that the wound would have healed yesterday.'

Note that, even though in Russian adjunct movement across a clausal boundary is normally allowed only into a focus/topic position at the very left periphery (Bailyn, 2003), within a single clause relatively unrestricted adjunct scrambling is attested; thus, if 'wound.DAT' in (9-b) were located within the matrix clause it would be possible to put the adjunct to the right of it.

(i) \*Mal'cik važno/ važen byť ubitym Voldemortom. boy.nom important.pr important.m.sg be.inf kill.ptcp Voldemort.ins Intended: 'It is important that the boy be killed by Voldemort.'

I assume that the ungrammaticality of (i) follows from the general ban on nominative subjects in the constructions under discussion. However, I must admit that, while this does not disprove the 'structural dative' hypothesis, at this point, I do not have independent evidence in support for it.

<sup>&</sup>lt;sup>5</sup>A reviewer asked whether, in such sentences, the dative subject of a non-finite clause may turn into nominative under passivization (which would arguably support the structural status of dative case; see Section 3.3). As shown in (i), the dative case cannot be over-written by the nominative case.

<sup>&</sup>lt;sup>6</sup>Although further subject movement into the matrix clause is possible (for instance, A-bar movement under focalization or topicalization), it is not obligatory and does not affect subject licensing.

# 2.2.3 THE DATIVE DP AS A MATRIX ATTITUDE HOLDER

As demonstrated in Section 2.2.1, in sentences under consideration coreference must be established between the dative DP and the understood embedded subject; however, the two elements can be only partially identical. This is shown in (10), where the embedded predicate 'disperse' and the *together*-type modifier in an embedded clause require a semantically plural subject, while the  $DP_{DAT}$  refers to a single person.

- (10) a. Maše<sub>i</sub> važno PRO<sub>i+</sub> pojti v kino vmeste.

  Maša.DAT important.PR go.INF in cinema together

  'For Maša it is important to go to the cinema together.'
  - Maše<sub>i</sub> važno PRO<sub>i+</sub> razojtis' v sem'.
     Maša.DAT important.PR disperse.INF at seven
     'For Maša it is important to disperse at seven.'

Availability of partial control is one of the strongest arguments for the structural presence of PRO and against the  $\mathrm{DP}_{\mathrm{DAT}}$  being the embedded subject itself (see Wurmbrand 2002; Landau 2013, i.a.). Furthermore, as has been noted in Section 2.1, Russian evaluative predicatives allow finite clausal complements; in this case, a dative Attitude Holder can still be present as an unambiguously non-coreferent item (cf. (2-b) repeated in (11)).

(11) Maše bylo važno, čtoby Anna ušla. Maša.DAT was important.PR so that Anna.NOM leave.subj 'To Maša it was important that Anna would leave.'

To summarize, the data presented in this section show that evaluative predicatives support both an analysis in terms of an overt referential embedded subject and obligatory control. The next section will consider the DP/PRO alternation in more detail.

# 3 THE DP/PRO ALTERNATION

# 3.1 COMPARING EMBEDDED CLAUSES WITH OVERT/COVERT SUBJECTS

It might be suggested that all evaluative predicatives are represented by homonymous pairs – a predicate selecting a clause with an overt subject and an obligatory control predicate that embeds a clause with a PRO subject. In recent literature on non-finite complementation, availability of overt referential subjects is often related to the presence of agreement and/or (semantic or syntactic) tense (see Landau (2004, 2013) and references therein). Adopting such an approach, we would expect embedded clauses with  $\mathrm{DP}_{\mathrm{DAT}}$  subjects to differ significantly from embedded constructions with PROs. However, in sentences with a matrix predicative in Russian no detectable difference can be found between non-finite complements of these two kinds.

First, no infinitive in Russian can be overtly marked for agreement. Thus, unless we want to stipulate covert agreement morphology in some non-finite clauses, clauses with DP and PRO subjects are identical in this respect.

Second, as demonstrated in (12), there is no overt tense morphology present and time reference of all non-finite constituents embedded under a predicative is determined in the same way relatively to the time reference of the matrix event.

- (12) a. Včera Marine<sub>i</sub> bylo važno [ PRO<sub>i+</sub> pojti v kino vmeste v yesterday Marina.dat was important.pr go.inf to cinema together on ponedel'nik].

  Monday
  - 'Yesterday it was important for Marina to go to the cinema together on Monday.'
  - b. Včera bylo važno [stroiteľstvu zakončiťsja k martu]. yesterday was important.pr construction.dat complete.inf by March 'Yesterday it was important that the construction be complete by March.'

6

In addition to this, in Russian all embedded non-finite clauses with overt/covert subjects appear to be structurally larger than TP, thus dismissing the idea that availability of subject-raising/ECM correlates with the structural size of the clause (Williams, 1987; Lasnik, 1998; Chomsky, 2001). As illustrated in (13), an embedded constituent can be moved to the embedded left focus position both in sentences with a dative Attitude Holder and in those where the  $\mathrm{DP}_{\mathrm{DAT}}$  can only be analyzed as the embedded subject.

(13) a. Anne<sub>i</sub> bylo važno [ TOĽKO SEGODNJA PRO<sub>i+</sub> pojti v kino Anna.dat was important.pr only today go.inf to cinema vmeste]. together.

'To Anna it was important that ONLY TODAY they would go to the cinema together.'

b. Bylo važno [IMENNO K MARTU sroiteľstvu zakončiťsja]. was important.pr exactly by March construction.dat complete.inf 'It was important for the construction to be complete exactly BY MARCH.'

Thus, the constructions with embedded non-finite clauses under consideration allow DP/PRO alternation in the same syntactic environment.

#### 3.2 THE TWO-DATIVE GENERALIZATION

The data presented in the previous sections contradict the assumption that referential subjects cannot stay within infinitival clauses (Landau 2004, 2015 i.a.) and support Sundaresan & McFadden's (2009) claim that referential DPs can, in principle, appear in any environment as long as independently motivated requirements of grammar are not violated.

I propose the following structural representation for sentences with a matrix predicative and an embedded non-finite clause (14).<sup>7</sup>

As schematized in (14), the embedded subject position is occupied either by an overt DP or PRO; however, the alternation is not entirely free. If it were unrestricted we would expect sentences with two overt dative DPs – a Holder and the embedded subject – to be grammatical. This prediction is not borne out as examples like (15-a) are judged as strictly unacceptable by all native speakers of Russian, even though, in general, two dative DPs can co-occur in a complex sentence (15-b).

- (15) a. \*Maše važno [stroitel'stvu zakončit'sja k martu].

  Maša.dat important.pr construction.dat complete.inf by March

  Intended: 'For Maša it is important for the construction to be complete by March.'
  - b.  $Maše_k$  važno [  $Anne_i$   $PRO_k$   $pomoč' t_i$ ]. Maša. DAT important. PR Anna. DAT help. Inf 'For Maša it is important to help Anna.'

To capture the restriction on DP/PRO alternation I propose the following **Two-Dative Generalization**: the embedded overt referential subject is allowed only when there is no overt (dative) DP controller available within a higher clause.

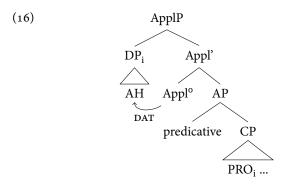
In the next section I further argue that the generalization is best formally accounted for by a cross-clausal Case assignment analysis.

# 3.3 THE CASE ASSIGNMENT ANALYSIS

In essence, I propose that a matrix Appl licenses either an overt Attitude Holder in Spec, ApplP or the embedded DP subject located at the left edge of its clause. Thus, the two DPs end up in complementary distribution competing for the same Case.

<sup>&</sup>lt;sup>7</sup>See Grashchenkov & Grashchenkova (2007); Geist (2010); Borik (2014), i.a., for discussions of evaluative adjectives being unaccusative.

The structure for sentences with an overt Attitude Holder is given in (16); here, I follow Pylkkänen (2008); Boneh & Nash (2017), i.a., and assume that a holder is introduced in Spec,ApplP and gets structural dative Case from the functional head Appl.



I further follow Chomsky (1981) and Chomsky & Lasnik (1993) in that overt DPs differ from PRO in requiring non-null Case to be licensed. Since the embedded clause is Case-deficient and there is no other source for 'free' Case available, only PRO merged in the embedded subject position survives derivation.<sup>8</sup>

An Attitude Holder can also be covert. I argue that, in this case, it is still syntactically present as a  $\varphi$ P (a weak implicit argument, see Landau's 2010 discussion of silent nominal phrases). On the one hand, a silent Attitude Holder obligatorily controls the embedded PRO subject (17).

i Petja<sub>i</sub> rešil [PRO<sub>i</sub> sdelat' ?? odnomu / samomu zadanije]. Petja.nom decided do.inf alone.dat himself.dat task.acc 'Petja decided to do the task alone/himself.'

The 'structural' dative case never appears on embedded secondary predicates (Grebenyova, 2004; Franks, 2014), even though case-concord with the controller is allowed in cases of subject control.

- ii a. Petja rešil ne prixodit' bol'še pjanym / pjanyj / \* pjanomu domoj. Petja.nom decided NEG come.INF anymore drunk.INS drunk.NOM drunk.DAT home 'Petja decided not to come home drunk anymore.'
  - b. Maša zastavila Petju pojti pjanym /\* pjanogo /\* pjanomu domoj. Maša.NOM forced Petja.ACC go.INF drunk.INS drunk.ACC drunk.DAT home 'Maša forced Petja to go home drunk.'

As proposed by Madariaga (2006), semi-predicatives are QPs undergoing direct adjunction to PredP/VP. However, a similar analysis has been put forward for case concord secondary predicates by Bailyn (2001), who argues that they are APs/NPs adjuncts to the clausal spine. We expect both kinds of modifiers to behave in the same way with regard to case marking, contrary to the facts. Until we fully account for case concord of semi-predicatives and predicates, the data cannot be considered reliable evidence of the availability of a structural subject case in non-finite clauses.

<sup>9</sup>Pitteroff & Schäfer (2019) argue that an implicit argument of a passive sentence is present only on the semantic level. However, the idea that at least some implicit arguments are syntactically projected and can be either DPs or  $\varphi$ Ps is advocated by Legate (2012, 2014), E.F. Sigurðsson (2017), Sigurðsson and Wood (2020), i.a. The detailed discussion of this issue lies beyond the limits of the paper but I believe that Landau (2010) presents sufficient support outside of the realm of the passive constructions for the idea that an implicit argument can be syntactically present. For instance, he considers the availability of partial obligatory control by an implicit argument of a psych adjective, which requires the controller to be structurally present.

<sup>&</sup>lt;sup>8</sup>In Russian, dative case occasionally appears on embedded subject-oriented semi-predicatives, which is taken to be evidence for availability of a structural subject case in non-finite clauses (Comrie, 1974; Franks, 1990; Franks & Hornstein, 1992; Babby, 1980; Moore & Perlmutter, 2000; Fleisher, 2006; Landau, 2008). However, I argue that the data are more complex than predicted by the existing accounts and require further examination before they could be used as support for clause-internal Case assignment. Consider, for instance, examples in (i), which were checked with seven native speakers of Russian. While the judgments vary, most of the speakers agreed that *samomu* is acceptable in such context, while *odnomu* is marginal. The degree of variation itself suggests that there are other factors yet to be examined that influence judgments and lead to apparent inconsistency of evaluations. Furthermore, these examples are problematic for theoretical accounts that predict that dative semi-predicatives should not be allowed in the case of subject control (cf. Landau 2008).

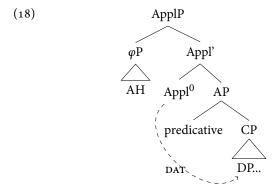
- (17) a. Načal'nikam važno, čtoby sotrudniki rabotali bol'še. bosses.dat important.pr so that employees.nom work.subj more 'For the bosses it is important that the employees work more.'
  - b. Sotrudniki govorjat / uznali, čto  $\varphi P_i$  važno PRO $_i$  rabotat' bol'še. employees.nom say learned that important.pr work.inf more
    - (i) 'The employees say/learned that for them it is important to work more.'
    - (ii) '... that for the bosses it is important to work more.'
    - Not available: '... that for the bosses it is important for the employees to work more'.
  - c. Sotrudniki uslyšali ot načaľstva, čto  $\phi P_i$  važno PRO $_i$  rabotať employees.nom heard from bosses that important.pr work.inf boľše.

more

- (i) 'The employees heard from the bosses that for them (employees) it is important to work more.'
- (ii) '... that for the bosses it is important to work more.'

Not available: '... that for the bosses it is important for the employees to work more.'

On the other hand, as a  $\varphi$ P, a covert Attitude Holder lacks a D-layer and does not need Case to be licensed, under the assumption that Case is a property of DPs (Landau, 2010). This allows the applicative head to assign Case to another DP.<sup>10</sup> Thus, an overt embedded subject becomes licit since it matches the required feature. The structure of such sentences is provided in (18).



<sup>&</sup>lt;sup>10</sup> If an Attitude Holder is implicit (a  $\varphi$ P) and the embedded subject is PRO, both caseless under the proposed analysis, the dative Case does not have to be assigned. This could be compared to the nominative Case assignment in impersonal constructions, such as (i) and (ii).

i a. Veter oprokinul vazu. wind.м.nом knock.over.psт.м.sg vase.ACC

'The wind knocked over the vase.'

adversity impersonal construction

Vazu oprokinulo vetrom
vase.ACC knock.over.pst.n.sg wind.ins

'The wind knocked over the vase.'

ii a. Petja žalel sobak Petja.nom pity.pst.m.sG dogs.acc 'Petja had compassion for the dogs.'

Petje bylo žal' sobak.
 Petja.DAT was.N.SG pity.PR dogs.ACC
 'Petja had compassion for the dogs'.

These clauses are finite, the verb exhibits the default 3/neuter.sg agreement, and yet no nominative subject is present. For a possible analysis of such constructions cf. Szucsich (2007), i.a.

I assume that downward Case licensing is available in Russian together with Spec-Head Case assignment (Kayne, 1989; Koopman, 2006): a matrix applicative head normally licenses an applied object in the Spec,ApplP position; only when the latter is a weak implicit argument can a cross-clausal dependency between the applicative head and the embedded subject be established. This can be accounted for by adopting a restricted 'hybrid' approach to feature valuation (Koopman, 2006).<sup>11</sup>

A piece of additional support for the proposed analysis comes from sentences with a matrix epistemic modal, such as *vozmožno* 'possible', *verojatno* 'probable'. As demonstrated in (19-a), (19-b), these predicates are incompatible with Attitude Holders, i.e. there is no ApplP in the matrix clause. At the same time, overt embedded subjects are prohibited (19-c), which suggests that the two phenomena – matrix applied objects and DP subjects in non-finite clausal complements – depend on the same factors.

- (19) a. (\* Maše) vozmožno vstretiť znakomyx Maša.DAT possible.PR meet friends.ACC
  - 'It is possible to meet friends.'
  - b. (\* Maše) vozmožno čto Anna vstretit znakomyx. Maša.DAT possible.PR that Anna.NOM meet.FUT friends.ACC
    - 'It is possible that Anna will meet her friends.'
  - c. \*Vozmožno stroiteľstvu zakončiťsja k martu.
    possible.pr construction.dat complete.inf by March
    Intended: 'It is possible that the construction will be complete by March.'

To summarize, I have demonstrated that Russian evaluative predicatives can embed non-finite clauses with either a covert (PRO) or an overt subject (DP). I argue that, in the first case, obligatory control is established between PRO and a matrix Attitude Holder, while in the second case the embedded DP subject must be licensed and the only way to do that is via cross-clausal Case assignment by the matrix Appl, which otherwise licenses an overt Attitude Holder. The data under discussion challenge the generally accepted assumption that Russian prohibits long-distance subject raising and ECM-like phenomena (Lasnik, 1998) and contribute to the discussion of DP distribution and long-distance A dependencies (Wurmbrand, 2019).

#### 4 GOING BEYOND: MODAL EXISTENTIAL CONSTRUCTIONS

As the second piece of support for the proposal, I would like to consider modal existential constructions, which, as will be demonstrated, fall under the Two-Dative Generalization and can be accounted for by the proposed analysis in terms of cross-clausal Case licensing. An in-depth discussion lies beyond the limits of the paper and I can only refer the reader to Burukina (2019) for more detail; in this section I would like to demonstrate that the DP/PRO alternation is attested in the constructions and that it is restricted in the same way as in sentences with matrix evaluative predicatives.

Modal existential constructions (MECs) in Russian consist of a dative DP, a finite existential BE verb that exhibits default 3/neuter singular agreement, an interrogative pronoun, and a non-finite clause; semantically, their interpretations involve root existential modality ('can', 'may').

Coreference between the dative DP and the understood subject of the embedded clause is obligatory (20), and there is an ongoing debate on whether a control relation is established or the overt embedded subject itself raises to a matrix position.

<sup>&</sup>lt;sup>11</sup>Firstly, it should be noted that downward Case assignment is arguably available in Russian in OVS constructions, where the direct object moves to Spec,TP and the nominative subject remains relatively low in the structure (Pereltsvaig, 2021). Secondly, under the assumption that the Appl head assigns dative Case, a question arises whether it is equipped with any features that would require valuation. While this is theoretically plausible, no overt direct/indirect object agreement is attested in Russian to verify the idea. However, if in a language where applicative heads overtly agree with an applied object a similar kind of DP/PRO alternation is attested, we would expect to find a correlation with the agreement pattern. I leave this issue to be examined by future research.

- (20) a. Petja $_{\rm j}$  znajet, čto Maše $_{\rm i}$  jest' čto  $ec_{{\rm i}/*{\rm j}}$  počitat'. Petja. $_{\rm NOM}$  knows that Maša. $_{\rm DAT}$  exists what. $_{\rm ACC}$  read. $_{\rm INF}$  'Petja knows that Maša has something to read.'
  - b. [Roditeljam  $Peti_j$ ]<sub>i</sub> jest' čto  $ec_{i/*_j}$  počitat'. parents.DAT Petja.GEN exists what.ACC read.INF 'Petja's parents have something to read.'

I argue that, just as in the case of evaluative predicatives, the two lines of argumentation should be reconciled to reveal the truth. On the one hand, MECs exhibit a crucial control property: partial coreference between the dative DP and the covert embedded subject is allowed.

- (21) a. Maše<sub>i</sub> jest' kogda PRO<sub>i+</sub> vstretit'sja.

  Maša.dat exists when meet.INF

  'Maša has time to meet.'
  - Maše<sub>i</sub> jest' čto PRO<sub>i+</sub> vmeste delat'.
     Maša.DAT exists what together do.INF
     'Maša has something to do together.'

On the other hand, at least some MECs show positive results for the diagnostics for an overt embedded subject, such as the idiom chunk (22-a) and non-sentience (22-b) tests.

- (22) a. Čërnoj koške<sub>i</sub> jest' iz-za čego t<sub>i</sub> probežat' meždu nimi. black cat.dat exists because-of what run.inf between them Idiomatic available: 'They have a reason to quarrel.'

  Literally: 'The black cat has a reason to run between them.'
  - Maslu bylo gde xranit'sja / tajat'.
     butter.DAT existed where be.kept.INF melt.INF
     'There was a place for butter where to be kept / to melt'.

Furthermore, MECs fall under the proposed Two-Dative Generalization: the matrix dative DP cannot co-occur with an overt embedded subject.

- (23) a. \*Nam jest' čto tebe pojest'.

  we.dat exists what you.dat eat.INF

  Intended: 'We have something for you to eat.'
  - b. U nas jest' čto tebe pojest'. at us exists what you.dat eat.INF 'We have something for you to eat.'

Building upon Šimík (2011) and Den Dikken (2006), I suggest the following (simplified) structural representations for modal existential constructions that exhibit obligatory control.

(24) 
$$[_{RP} DP_{DATi} [_{R'} R^{o} [_{CP} wh [_{C'} C^{o} [PRO_i infinitive]]]]]$$

I argue that the traditional descriptions should be further revised to account for the possibility of an overt embedded subject licensed by the higher functional head (here, R(elator)) when the matrix participant is an implicit  $\varphi$ P, in the way presented in (25).

(25) 
$$\left[_{RP} \varphi P \left[_{R'} R^{o} \left[_{CP} wh \left[_{C} C^{o} \left[DP \text{ infinitive}\right]\right]\right]\right]\right]$$

As in the case of sentences with a matrix evaluative predicative and an embedded non-finite clause, the cross-clausal Case assignment analysis might be not the only way to account for the control vs. no control ambiguity of MECs. However, the proposed approach can straightforwardly capture the relevant properties noted by the two competitive lines of research.

#### 5 CONCLUDING REMARKS

I have demonstrated that, in Russian, the DP/PRO alternation is attested in non-finite clauses of the same structural size and Tense and agreement characteristics embedded under an evaluative predicative. The alternation is restricted by the presence of a potential matrix DP<sub>DAT</sub> controller, as lexical embedded subjects are available only when the closest matrix argument (an Attitude Holder) is implicit.

We have also seen that the correlation between the presence of a matrix  $DP_{DAT}$  argument and the availability of an embedded  $DP_{DAT}$  subject holds for other kinds of constructions, including epistemic modals and modal existential constructions. The matrix DP and the embedded DP appear to be closely connected, and I propose that this connection and the complementarity follow from the simple fact that the two are licensed by the same functional head, namely the matrix Appl in the case of evaluative predicatives.

This explanation sides with other approaches to DP/PRO alternation in terms of Case licensing. I argue that a lexical embedded subject is Case licensed by a matrix applicative head over a clausal boundary, if the Case is not 'taken' by a DP in the Spec,ApplP. In sentences with a matrix evaluative predicative this could happen if the matrix Holder is an implicit  $\varphi$ P that does not have a Case layer (DP/KP).

I further assume that PRO does not need non-null Case to be licensed. Crucially, although I advocate the Case licensing approach, the proposed analysis falls in line (to a certain extent) with approaches that postulate a relatively free distribution of DPs and PRO. This highlights the issue that, in its core, the Case licensing framework does not prohibit overt DPs to be merged as subjects of non-finite clauses, as it merely states that they will not 'survive' in that position without some help from the outside. This contrasts with many 'non-Case licensing' approaches, such as Landau's (2015) Two-Tiered theory of control and Sigurðsson (2008). Although at first glance these analyses agree with, for instance, Sundaresan & McFadden's (2009) approach in rejecting relevance of Case, they introduce various mechanisms to prevent lexical and PRO subjects from ever appearing in the same embedded environments.

If the proposed analysis is on the right track, the case of cross-clausal Case assignment under consideration falls under the general discussion of various cross-clausal A-dependencies: subject raising and agreement across clause boundaries; see Wurmbrand (2019) for an overview. The Russian constructions complement the already known data and add Appl to the general picture, suggesting that all functional heads on the clausal spine that can assign Case are capable of establishing inter-clausal relations with a DP (see Nunes 2009; Şener 2011; Deal 2017, i.a., for discussions of long-distance agreement with T and Voice/v).

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#### REFERENCES

- Babby, Leonard Harvey. 1980. Existential sentences and negation in Russian. Ann Arbor, MI: Karoma Publ.
- Bailyn, John F. 2001. The syntax of Slavic predicate case. In Gerhard Jäger, Anatoli Strigin, Chris Wilder & Niina Zhang (eds.), Papers on predicative constructions, 1-25. Berlin: Zentrum für Allgemeine Sprachwissenschaft.
- Bailyn, John Frederick. 2003. A (purely) derivational approach to Russian scrambling. In Wayles Browne, Ji-Yung Kim, Barbara H. Partee & Robert A. Rothstein (eds.), Proceedings of Formal approaches to Slavic linguistics. The Amherst meeting, vol. 11, 41-62. Ann Arbor, MI: Michigan Slavic Publications.
- Bonch-Osmolovskaja, Anastasija. 2003. Konstrukcii s dativnym subjektom v russkom jazyke: opyt korpusnogo issledovanija. Moscow: Moscow State University dissertation.
- Bondaruk, Anna. 2006. The licensing of subjects and objects in Irish non-finite clauses. *Lingua* 116(11). 1840-1859.
- Boneh, Nora & Léa Nash. 2017. The syntax and semantics of dative DPs in Russian ditransitives. *Natural Language & Linguistic Theory* 35(4). 899–953.
- Borik, Olga. 2014. The argument structure of long and short form adjectives and participles in Russian. Lingua 149. 139-165.
- Burukina, Irina. 2019. Raising and control in non-finite clausal complementation. Budapest: Eötvös Loránd University dissertation.
- Burukina, Irina. 2020. Mandative verbs and deontic modals in Russian: Between obligatory control and overt embedded subjects. *Glossa: a journal of general linguistics* 5(1). 54.
- Chomsky, Noam. 1981. Lectures on Government and Binding. Dordrecht and Cinnaminson, NJ: Holland and Foris Publications.
- Chomsky, Noam. 2001. Derivation by Phase. In Michael Kenstowicz (ed.), Ken Hale: A Life is Language, 1-52. Cambridge, MA: MIT Press.
- Chomsky, Noam & Howard Lasnik. 1993. The theory of principles and parameters. In Joachim Jacobs, Arnim von Stechow, Wolfgang Sternfeld & Theo Vennemann (eds.), Syntax: An international handbook of contemporary research, 506-569. Berlin and New York: De Gruyter Mouton.
- Comrie, Bernard. 1974. The second dative: A transformational approach. Slavic transformational syntax 10.
- Deal, Amy Rose. 2017. Covert hyperraising to object. In Proceedings of the 47th Meeting of the North East Linguistic Society (NELS 47), 257–270. Amherst, MA: University of Massachusetts, GLSA.
- Den Dikken, Marcel. 2006. Relators and linkers: the syntax of predication, predicate inversion, and copulas, vol. 10. Cambridge, MA: MIT Press.
- Fleisher, Nicholas. 2006. Russian dative subjects, case, and control. Unpublished manuscript. UC Berkeley.[https://pantherfile. uwm. edu/fleishen/www/papers/Fleisher\_RussianDatSubj. pdf].
- Franks, Steven. 1990. Case, configuration and argumenthood: reflections on the second dative. *Russian linguistics* 14(3). 231–254.
- Franks, Steven. 2014. The overgeneration problem and the case of semipredicatives in Russian. Advances in the Syntax of DPs. Structure, agreement, and case. Linguistik Aktuell 217. 13-60.

- Franks, Steven & Norbert Hornstein. 1992. Secondary predication in Russian and proper government of PRO. In Control and grammar, 1–50. Springer.
- Geist, Ljudmila. 2010. The argument structure of predicate adjectives in Russian. Russian linguistics 34(3). 239-260.
- Grashchenkov, Pavel & Anna Grashchenkova. 2007. Argument structure of Russian adjectives. Talk given at the Workshop on argument structure and syntactic relations, Vitoria-Gasteiz.
- Grebenyova, Lydia. 2004. Agreement in Russian secondary predicates. In Proceedings from the Annual Meeting of the Chicago Linguistic Society, vol. 40, 69-81. Chicago, IL: Chicago Linguistic Society.
- Kayne, Richard. 1989. Facets of Romance Past Participle Agreement. In Dialect Variation and the *Theory of Grammar*, 85–103. Foris Publishers.
- Koopman, Hilda. 2006. Agreement configurations: in defense of "Spec head". In Cedric Boeckx (ed.), Agreement systems, 159–199. Amsterdam: John Benjamins.
- Landau, Idan. 2000. Elements of control: Structure and meaning in infinitival constructions, vol. 51. Dordrecht: Springer Science & Business Media.
- Landau, Idan. 2004. The scale of finiteness and the calculus of control. Natural Language & Linguistic *Theory* 22(4). 811–877.
- Landau, Idan. 2008. Two routes of control: Evidence from case transmission in Russian. Natural Language & Linguistic Theory 26(4). 877-924.
- Landau, Idan. 2010. The explicit syntax of implicit arguments. *Linguistic Inquiry* 41(3). 357–388.
- Landau, Idan. 2013. Control in generative grammar: A research companion. New York, NY: Cambridge University Press.
- Landau, Idan. 2015. A two-tiered theory of control. Cambridge, MA: MIT Press.
- Lasnik, Howard. 1998. Exceptional case marking: Perspectives old and new. In Proceedings of Formal Approaches to Slavic Linguistics 6, 187–211. Ann Arbor, MI: Michigan Slavic Publications.
- Madariaga, Nerea. 2006. Why Russian semi-predicative items always agree. Journal of Slavic linguistics 45–78.
- Moore, John & David M Perlmutter. 2000. What does it take to be a dative subject. Natural Language & Linguistic Theory 18(2). 373-416.
- Nunes, Jairo. 2009. Brazilian Portuguese under minimalist lenses. In Jairo Nunes (ed.), Minimalist essays on Brazilian Portuguese syntax, 3–14. Amsterdam: John Benjamins.
- Pereltsvaig, Asya M. 2021. OVS order in Russian: Where are the O and the V? Journal of Slavic Linguistics 29(FASL extra issue). Proceedings of Formal Approaches to Slavic Linguistics 28; Andrei Antonenko and John F. Bailyn (eds.).
- Pires, Acrisio. 2007. The derivation of clausal gerunds. Syntax 10(2). 165-203.
- Pitteroff, Marcel & Florian Schäfer. 2019. Implicit control crosslinguistically. Language 95(1). 136-184.
- Pylkkänen, Liina. 2008. Introducing arguments, vol. 49. Cambridge, MA: MIT press.
- Say, Sergey. 2013. On the nature of dative arguments in Russian constructions with "predicatives". Current studies in Slavic linguistics 225-245.

- Şener, Serkan. 2011. Cross clausal licensing of Accusative case on subjects of CPs in Turkish. In Suzi Lima, Kevin Mullin & Brian Smith (eds.), *Proceedings of the 39th Meeting of the North East Linguistic Society (NELS 39)*, 679–690. Amherst, MA: University of Massachusetts, GLSA.
- Sigurðsson, Halldór Ármann. 2008. The case of PRO. *Natural Language & Linguistic Theory* 26(2). 403–450.
- Sitaridou, Ioanna. 2007. Romance infinitives with subjects, subjunctive obviation and Control Theory. *Coreference, modality, and focus: Studies on the syntax semantics interface* 111. 191.
- Sundaresan, Sandhya & Thomas McFadden. 2009. Subject distribution and finiteness in Tamil and other languages: Selection vs. case. *Journal of South Asian Linguistics* 2.
- Szucsich, Luka. 2007. Nothing wrong with finite T: non-agreeing accusative impersonal sentences. In ?editor? (ed.), *Proceedings of Formal Approaches to Slavic Linguistics*, vol. 15, 401–419. Ann Arbor, MI: Michigan Slavic Publications.
- Williams, Edwin. 1987. Implicity arguments, the binding theory, and control. *Natural Language & Linguistic Theory* 5(2). 151−180.
- Wurmbrand, Susi. 2002. Syntactic versus semantic control. In Jan-Wouter Zwart & Werner Abraham (eds.), *Studies in comparative Germanic syntax: Proceedings from the 15th workshop on comparative Germanic syntax*, vol. 53, 93–127. Amsterdam: John Benjamins Publishing.
- Wurmbrand, Susi. 2019. Cross-clausal A-dependencies. In Eszter Ronai, Laura Stigliano & Yenan Sun (eds.), *Proceedings of the Chicago Linguistic Society meeting*, vol. 54, 585–604. Chicago, IL: University of Chicago.
- Šimík, Radek. 2011. *Modal Existential wh-constructions*. Groningen: Rijksuniversiteit Groningen dissertation.